

Determine the convergence or divergence of the following series:

1. $\sum_{k=2}^{\infty} \frac{3^k}{5^k + 2k}$

2. $\sum_{m=3}^{\infty} \frac{2m}{7m + 18}$

3. $\sum_{j=5}^{\infty} \frac{(j-2)!}{(j-1)!}$